Attachment 10B

**Site Photographs** 





The Chlorine, Central, and Western ditches lead from the plant (to the right), connecting with the Main Ditch (center foreground) flowing to the waste-lagoons.



Starting point of the Chlorine Ditch showing a variety of plant discharges. The former Boron Ditch (now buried) is located a short distance east (towards background) of this ditch.



View towards plant downstream of Chlorine Ditch, with more discharges joining stream.



View from head of Central Ditch plant discharge looking north towards Main Ditch



Confluence of Chlorine and Main ditches showing suspected chlorine gas venting from end of submerged pipe.



Close-up of chlorine gas discharge at confluence of Main and Chlorine ditches



Main Ditch (Red River) looking east from confluence with Chlorine Ditch



Oily waste seep-discharging into Main Ditch



Oil sheen in Main Ditch (lower-right) from Western/Central Ditches at confluence with Chlorine Ditch (upper-right).





Dashed box shows general extent of landfill; newest fill-zones in foreground (east).



Recent refuse disposal into Landfill; waters of the SE-ponded waste lagoon visible in background (September 2011).



Disposed tank in Landfill partially submerged in shallow water-table (September 2011).



View west over 'early-decades portion' of Landfill, showing relative thickness above original ground surface (to left-center).





View north over the Sanitary Lagoon.



Liquid-discharge inlet area of the Sanitary Lagoon PRI 3.





Areal extent of gypsum waste pile PRI 4.



Slurry pipe discharging wastes stream atop gypsum pile.



Slurry discharge channel (excavated and moved periodically to redirect flow) across top of Gypsum Pile.



Gypsum Pile slurry dispersing onto pile area; waters of NW-lagoon visible in distance.



Animal tracks on Gypsum Pile waste.

## Photographs of Northwest and Southeast Ponded Waste Lagoons PRIs 5 and 6 Active Waste Lagoons



North-eastern shoreline of SE Ponded Waste Lagoon; magnesium plant in distance and landfill in escarpment (upper left) between plant and lagoon; main ditch carrying wastes from plant visible in distance between landfill and whitish earthen dike on right. (September 2011)



View south overlooking eastern 'shoreline' of SE Ponded Waste Lagoon (May, 2010).



View south over waters and waste-sediments in SE Ponded Waste Lagoon (May, 2010).



Eastern shoreline of SE Ponded Waste Lagoon; historic GSL shoreline 'beach' area to left. (May 2010)



Native ground-cover and diggings of oolitic sand along northern shoreline of NW Ponded Waste Lagoon; ATI's concrete building and 'smut' residues visible in distance. (May, 2010)



Flooded native ground (dead native-shrub wood-stalks) of NW Ponded Waste Lagoon; Magnesium Plant and ATI plant (concrete building) in distance. (May, 2010)



View of native ground-cover along northern shoreline of NW Ponded Waste Lagoon (gypsum pile and landfill in distance across lagoon); numerous gulls in flight. (May, 2010)



Southern area of NW Ponded Waste Lagoon; gypsum waste-sediment and waste-streams extending into the lagoon waters. (May, 2010)



Southeastern shoreline of the NW Ponded Waste Lagoon. (May, 2010)

## Photographs of Northeast Ponded Waste Lagoon PRI 7 Abandon Inactive Waste Lagoon



Northeast Ponded Waste Lagoon from western edge of former waste pond (May, 2010).



View of NE Ponded Waste Lagoon looking to south. Pond wastes and standing water to left (May 2010).



View looking south at north-east corner of NE Ponded Waste Lagoon. 'High-waters' of NE-Lagoon to right of 'dike/road'; fresh-waters Skull-Valley Diversion Canal flowing into GSL to left (east) of road (May 2010).



Dry and encrusted bed of NE-Ponded Waste Lagoon (September 2011).



View to SW across waste-sediments of historic NE-Ponded Waste Lagoon (May 2010).



Evidence of livestock grazing along shoreline of NE Ponded Waste Lagoon (May 2010).



Small animal burrows along historic GSL shoreline adjacent to NE Ponded Waste Lagoon (May 2010).



Large-bird tracks in dried mud on roadway between NE Ponded and SE Ponded Waste Lagoon.



Dry encrusted waste/sediments in NE Ponded Waste Lagoon with dead insect (September 2011).





Weathered (old) portion of the Smut Piles



Less weathered portions of the Smut Pile



Dark-colored un-weathered Smut



Like and dark colored unweathered Smut





Light colored flat area to right at end of road in distance is the Barium Sulfate Area landfill

Photographs of the ATI Titanium Plant and US Magnesium Parking Lots PRI 11



Developed and landscaped areas around ATI plant parking lot



Open ground between USMag pland and ATI plant



Undeveloped ground around SE area of ATI complex

## Photographs of US Magnesium Ancillary Worker Exposure Area PRI 12



View of open ground in PRI-12's western area, south of Hill Brother Chemical facilities



View over eastern portion of PRI-12 overlooking open ground east of the magnesium plant's Star-Pond reservoir.





Buffer Area North and East showing the northern portion of the buffer area and the shrimp harvester's seasonal camp and active ponded waste lagoons in background.



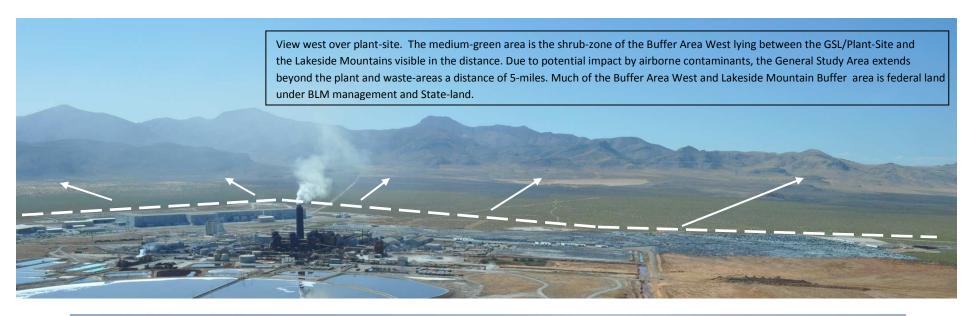
Buffer Area North and East, the Skull Creek Diversion, and solar evaporation ponds in background.

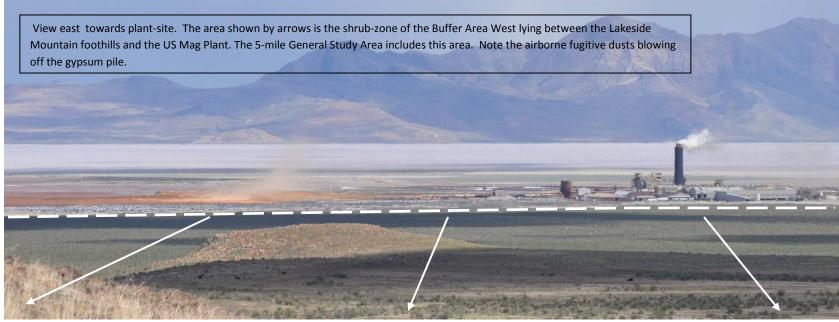


Buffer Area North and East showing GSL inlet.



Aerial view over Buffer Area North and East showing GSL inlet.





## Photographs of Buffer Area South PRI 14



View looking to west-southwest over the northern area of PRI-14 Buffer Area South

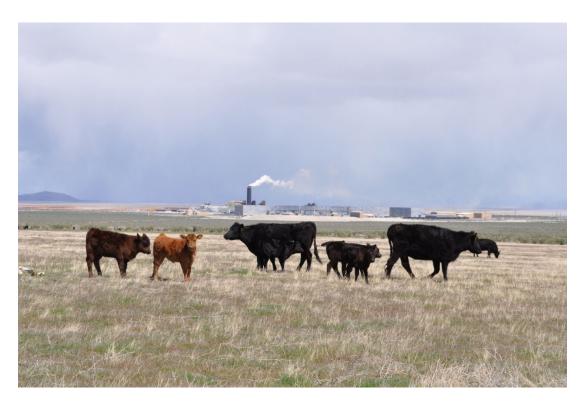


Wet areas along northern portion of PRI-14 due south of PRI-5



Seeps discharging into brine-fly laden wetlands in northern portion of PRI 14





Cattle grazing in Buffer Area West (April 2011).



Buffer Area West vegetation with US Mag plant in background.



View SE overlooking vegetation zones in the Buffer Area West.



Shrub vegetation in Buffer Area West .



Man-made spring in Buffer Area West.



Amphibians in man-made spring in Buffer Area West.



Animal burrow in Buffer Area West.





Pronghorn antelope moving from lowlands to Lakeside Mountain Buffer Area (April 2011).

Site-wide Air PRI 17 Note: No photographs in Log for PRI 17 Site-wide Water PRI 18 Note: No photographs in Log for PRI 18

**US Magnesium Superfund Site** ...air-borne contaminants/exposure investigation. 5 miles